

REMARKS

Summary of Office Action

Claims 1-23 were pending.

Claims 1-7, 7-17 and 23 have been rejected under 35 U.S.C. § 103(a) as being obvious from Schmerken (Ivy Schmerken, "Real Liffe or Virtual Reality." Wall Street & Technology. New York: Jan. 1997. Vol. 15, Iss. 1, p. 70) ("Schmerken") in view of Tomasula (Dean Tomasula, "Virtual Trading is Virtually a Reality." Wall Street & Technology. New York: Oct. 1995. Vol. 13, Iss. 10, p. 44) ("Tomasula"). Claims 8-10 and 18-22 have been rejected under 35 U.S.C. § 103(a) as being obvious from Schmerken in view of Tomasula as applied to claim 5, and further in view of Marshall U.S. Pat. No. 5,675,746 ("Marshall").

Applicants' Reply

Applicants respectfully traverse the prior art rejections.

Applicants request careful consideration of all of the elements of claims 1-23.

Applicants respectfully submit that the Office Action has improperly rejected claim 1-23 (as being obvious the cited references) without establishing a proper prima facie case of obviousness. (See Office Action, pages 2-15).

To establish a prima facie case of obviousness under § 103(a), according to MPEP § 2143, three basic criteria must be met: (1) some suggestion or motivation to modify the cited references; (2) a reasonable expectation of success; and (3) a teaching or suggestion of all the elements of the claim.

Applicants also respectfully note, according to MPEP § 2124. "[t]he initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. 'To support the conclusion that the claimed invention is directed to obvious subject

matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.' Ex parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985)."

The §103(a) rejection of claim 1-23 in the Office Action does not address or satisfy any of the three criteria required to establish a prima facie case of obviousness. Further, the Examiner improperly uses hindsight to reject these claims.

Independent Claims 1, 5, 11 and 15

These claims have been improperly rejected as being obvious from Schmerken in view of Tomasula ("Tomasula").

Claim 1, which is a "method for managing trading and system activity in a trading exchange," calls for:

"at a centralized location, providing a visual display of trading exchange activity including systems activity and trading activity to a trading exchange supervisor or manager; and

providing an interactive decision support interface coupled to the visual display of trading exchange activity.

At least these elements of claim 1 are not obvious from the combination of Schmerken and Tomasula as viewed by a person of ordinary skill in the art.

Schmerken

Present claim 1 calls for a “method for managing trading and system activity in a trading exchange,” and not merely, as previous versions of claim 1, “a method for displaying data representing the operation of an exchange.”

The Examiner alleges Schmerken discloses “a method for displaying data representing the operation of an exchange.” (See Office Action page 2, bottom). Applicants disagree. Applicants note that Schmerken provides no details of the alleged method. Schmerken merely reports a mockup exhibit or show by Liffe to provide virtual reality simulations for designing trading floors. (See e.g., page 1 para. 4, last sentence of para. 6, paras. 7 and 8 etc.).

Schmerken, in fact, teaches away from the use of virtual reality for trading activity: “The Exchange has not and does not intend to extend the use of [virtual reality] technology for the purposes of trading.” (See Schmerken paragraph 12). Thus, applicants note that not only does Schmerken not disclose “a method for managing trading and system activity in a trading exchange, as required by present claim 1, Schmerken teaches away from the claimed method for managing trading and system activity.”

Therefore, applicants submit that it is, in the first instance, improper for the Office Action to combine Tomasula to Schmerken. Applicants note that the Examiner’s analysis of the combination of Tomasula with Schmerken is contradictory. The Examiner first cites Schmerken presumably for its description of the virtual reality experience (sight and sounds) of a live trading floor provided at a show to attendees, who wear a “headset” and “swing their heads” to view the ceiling and walls” (See Schmerken paras. 4 and 5). Yet, the Examiner, then inconsistently

argues that Schmerken is irrelevant by stating that “a participant in the virtual reality system would not need to wear a space suit, goggle and gloves to be connected to a web of wires” “and simply representing 2D images on a computer screen is more simple and efficient”. (See Office Action, page 4, first paragraph). Applicants believe that the Examiner is thus at least implicitly acknowledging the incompatibility of Schmerken and Tomasula.

Applicants submit that a person of ordinary skill in the art will readily recognize that technical term “immersive” virtual reality is opposite and contradicts the term “flat” or “non-immersive” virtual reality. Applicants submit that the latter is a misnomer and is at most no different than conventional 2-D audiovisual display technology.

Again, Schmerken does not show, teach or suggest

“at a centralized location, providing a visual display of trading exchange activity including systems activity and trading activity to a trading exchange supervisor or manager; and providing an interactive decision support interface coupled to the visual display of trading exchange activity,” as required by claim 1.

Tomasula

Even when the references are combined as viewed by a person of ordinary skill in the art, Tomasula does not overcome the deficiencies of Schmerken and fails to lead at least to the above identified elements of claim 1.

Tomasula is news story on a “wishful” presentation by Erick Brethenoux prophesizing application of virtual reality technology for replacing current trading floors with

virtual reality floors. (See Tomasula, title, page 1 paragraph 1, etc.). Tomasula's presentation in fact relates to "Multimedia Desks." (See Tomasula, paragraphs under heading "Multimedia Desks," etc.). Tomasula even notes "[b]ut before the virtual can become reality, asynchronous transfer mode (ATM) networks will have to become more widespread." (See Tomasula page 46 paragraph preceding heading "Multimedia Desks," etc). The photograph at the end of the Tomasula is merely a mock up of a physical trading floor.

Contrary to Examiner's allegations, there is no description or suggestion in Tomasula that the mock-up photograph or other text corresponds to

"at a centralized location, providing a visual display of trading exchange activity including systems activity and trading activity to a trading exchange supervisor or manager; and

providing an interactive decision support interface coupled to the visual display of trading exchange activity,"

as required by claim 1.

Tomasula merely describes a conventional ATM system having plural conventional multimedia (i.e. "audio, video, and data communications") interactions between multiple traders (including "direct conversations" "application sharing," "video" for "seeing the face of the person" etc.). (See Tomasula page 46 first and second paragraphs , and all paragraphs under the heading "Trader Interactions" and under the heading "MultiMedia Desks").

Contrary to the Office Action allegations, there is nothing in Tomasula under the heading "Trader Interaction" or elsewhere, which shows, teaches or suggests "providing an

interactive decision support interface coupled to the visual display of trading exchange activity” (where the visual display is the visual display of the preceding claim element, i.e., of trading exchange activity including systems activity and trading activity to a trading exchange supervisor or manager), as required by claim 1.

Further, contrary to the Office Action allegations, there is nothing in Tomasula at “page 3 ‘paragraph 6’,” or elsewhere, which shows, teaches or suggests under the heading ‘Trader Interaction,’ which shows, teaches or suggests “at a centralized location, providing a visual display of trading exchange activity including systems activity and trading activity to a trading exchange supervisor or manager,” as required by claim 1

Further, contrary to the Office Action allegations, there is nothing in Tomasula at “Page 2, paragraph 10 “Flat Reality”,” or elsewhere, which teaches, shows or suggests, “generating a two dimensional display representing an aspect view of said three dimensional model selected via the interactive decision support interface.” as required by claim 1. Applicants note that Tomasula’ Flat Reality merely describes ordinary computer screen displays of data or files. There is no hint in Tomasula of selecting an aspect view of said three dimensional model or generating a corresponding 2D display.

Applicants submit that at least in view of the foregoing the combination of Schmerken and Tomasula does not render claim 1 obvious to a person of ordinary skill in the art.

Accordingly, claim 1 is patentable over the combination of Schmerken and Tomasula.

Independent claims 5, 11 and 15 include limitations similar to those of claim 1. For at least the same reasons as claim 1, these claims are also not obvious from and patentable over the combination Schmerken and Tomasula.

Dependent claims 2-4, 7-10, 12-14, and 16-23.

These dependent claims are patentable over the cited references for at least the same reasons respective parent claims 1, 5, 11 and 15 are patentable as discussed above. Accordingly, for brevity, Applicants do not address the obviousness rejection in the Office Action of these claims individually, but reserve the right to do so in further prosecution if necessary.

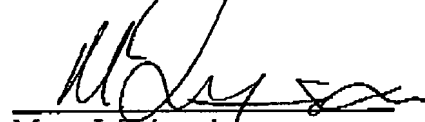
For at least the foregoing reasons, claims 1-23 are non-obvious and patentable over the cited references even when the references are viewed in combination.

Conclusion

This application is now in condition for allowance. Reconsideration and prompt allowance of which are requested. If there are any remaining issues to be resolved, applicant respectfully requests the Examiner to kindly contact the undersigned attorney by telephone for an interview.

Applicants petition for a three-month extension of time for filing this paper, and authorize the Commissioner to charge the necessary extension-of-time fees to our Deposit Account No. 02-4377.

Respectfully submitted,
BAKER BOTTS L.L.P.



Manu J. Tejwani
PTO Reg. No. 37,952

Baker Botts L.L.P.
30 Rockefeller Plaza
New York, NY 10112
(212) 408-2614
Attorneys for Applicants